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Shared-memory networks: description, history, and application in real-time systems

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SYSTRAN Corp., Dayton, OH, USA;

 This paper appears in: **Electrical and Computer Engineering, 1993. Canada Conference on**

Meeting Date: 09/14/1993 - 09/17/1993

Publication Date: 14-17 Sept. 1993

Location: Vancouver, BC Canada

On page(s): 713 - 716 vol.2

Reference Cited: 5

Inspec Accession Number: 4811722

Abstract:

Real-time systems, such as test instrumentation, hardware and person in-the-loop simulators, virtual reality environments, aircraft avionics suites, and process control systems have evolved significantly during the last few years, keeping pace with technologies and attempting to provide the required speed and bandwidth interconnectivity between the various sensors, processors, and other nodes which comprise these systems. To support such applications, shared-memory network technology provides an attractive alternative to the more conventional approach which utilizes single or multiple CPU's contained within the same chassis. This paper describes the history, technology, current trends, and selected applications of memory networks in real-time simulation, testing, and computational applications.

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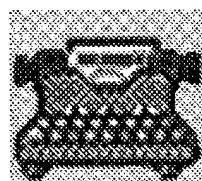
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